UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/460,913	12/14/1999	LIAM DAVID COMERFORD	YO998-522	3104

7590	01/26/2004

WAYNE L. ELLENBOGEN
RYAN, MASON & LEWIS, LLP.
90 FOREST AVENUE
LOCUST VALLEY, NY 11560

EXAMINER
AZAD, ABUL K

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 01/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _21 October 2003_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-19_ is/are pending in the application.

　　4a) Of the above claim(s) ＿＿＿ is/are withdrawn from consideration.

5)☐ Claim(s) ＿＿＿ is/are allowed.

6)☒ Claim(s) _1-19_ is/are rejected.

7)☐ Claim(s) ＿＿＿ is/are objected to.

8)☐ Claim(s) ＿＿＿ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on ＿＿＿ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. ＿＿＿.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

　　a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ＿＿＿ .

4)☐ Interview Summary (PTO-413) Paper No(s). ＿＿＿ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other:

DETAILED ACTION

1.   In view of the Appeal Brief filed on October 21, 2003, PROSECUTION IS

HEREBY REOPENED. A non-final rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the

following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied

by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130,

1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Specification

2.   The specification is objected to because references to related applications should

be made by application number and filing date. The citations to nonprovisional

application should be brought up to date if any of the applications have been

abandoned or matured into patents, and as appropriate, the application serial number s

or patent numbers should be included. Including current titles of the applications is

encouraged. See MPEP 201.11 and MPEP 608.01 Specification. Correction is required

throughout of the disclosure, for example at Page 1, lines 4-9.

3.   The disclosure is objected to because it contains (for example, page 37, line 24)

an embedded hyperlink and/or other form of browser-executable code. Applicant is

required to delete the embedded hyperlink and/or other form of browser-executable

code. See MPEP § 608.01.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1-5, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by

Basore et al. (US 5,752,232).

As per claim 1, Basore teaches, "in apparatus for providing a portable spoken

language interface for a user to a device in communication with the apparatus", the

device having at least one application associated therewith, the spoken language

interface apparatus comprising:

"(A) an audio input system for receiving speech data provided by the user" (col.

2, lines 36-37, as a microphone which receives the user's voice);

"(B) an audio output system for outputting speech data to the user" (col. 5, lines

16-20, as a text-to speech unit to communicate an acoustic response to the user);

"(C) a speech recognition engine for generating an output in response to spoken

utterances" (col. 4, line 63 to col. 5, line 12, as a speech recognition unit for recognizing

a command for the applications software spoken by the user);

"(D) a speech synthesizing engine for generating a synthesized speech output in response to text data" (col. 5, lines 19-20, as a text-to-speech unit for transforming text into an acoustic response);

"(E) a dialog manager operatively coupled to the device, the audio input system, the audio output system, the speech recognition engine and the speech synthesizing engine" (col. 4, line 57 and col. 2, lines 54-59, as application software in the microprocessor and DSP chip; col. 3, lines 32-38, as coupled to a processor connected to an application memory; col. 2, lines 43-59, as signal sent from a microphone through an A/D converter received by the voice activated device having a DSP chip coupled to the microprocessor; col. 5, lines 9-21, as application software residing in the microprocessor transforms to retrieved response into an acoustic response communicated to the user; col. 4, lines 57-58, as application software which reside in the microprocessor interacts with the speech recognition unit; col. 9, lines 9-20, as application software residing in the microprocessor sends a retrieved response to the text-to-speech unit); and

"(F) at least one user interface data set operatively coupled to the dialog manager, the user interface data set representing spoken language interface elements and data recognizable by the application of the device" (col. 4, lines 64-67, as a phonetic acoustic models dictionary and at col. 3, lines 40-44, as stored application data phonetic spelling used in a particular application; col. 5, lines 2-3, as the database and the dictionary couple via microprocessor; col. 2, lines 64-65, as the acoustic models

database stores models of how phonemes are spoken and col. 3, lines 66-67, as

phonetic spelling for the applications for services of the processor at the central office);

"(i) the dialog manager enables connection between the input audio system and

the speech recognition engine such that the spoken utterance provided by the user is

provided from the input audio system to the speech recognition engine" (col. 4, lines 52-

64, as application software which resides in the microprocessor interacts with the

speech recognition unit on commands transmitted by the handset);

"(ii) the output generated by the speech recognition engine is returned to the

dialog manager" (col. 5, lines 1-11, as the speech recognition unit recognizes the

command spoken as words that comprise the command; col. 5, lines 9-10, as word

identifiers used by the application software residing in the microprocessor);

"(iii) the dialog manager uses the output generated by the speech recognition

engine to search the user interface data set for a corresponding spoken language

interface element and data which is returned to the dialog manager when found" (col. 5,

lines 9-15, as the application software residing in the microprocessor uses the unique

word identifiers associated with words to retrieve the appropriate response; col. 4, lines

22-27, as information related to applications; col. 4, lines 30-31, as the device receives

the additional application data);

"(iv) the dialog manager provides the spoken language interface element

associated data to the application of the device for processing in accordance therewith"

(col. 3, line 58 to col. 4, line 25, the microprocessor provides spelling and application

data to processor at the central office depending upon the particular application);

"(v) the application of the device, on processing that element, provides a

reference to an interface element to be spoken; (col. 5, lines 9-21, as the additional

application data, once the command spoken is recognized , has the appropriate

response to be retrieved and sent to be transformed into an acoustic response);

"(vi) the dialog manager enables connection between the audio output system

and the speech synthesizing engine such that the speech synthesizing engine which,

accepting data from that element, generates a synthesized output that expresses that

element; (col. 5, lines 9-21, as application software residing in the microprocessor

sends to the text-to-speech unit acoustic response transformation and the text-to-

speech unit response text for the text-to-speech unit, with sent response text, issues the

acoustic response thus transformed from the response text); and

"(vii) the audio output system audibly presenting the synthesized output to the

user" (col. 5, lines 16-21, as the text-to-speech unit acoustic responds is issued as

response text transformed into an acoustic responds by the text-to-speech unit

communicated to the user);

"a method for modifying a data structure containing the at least one user

interface data set", comprising:

"adding a new application to the device" (col. 4, lines 22-29, as information

related to weakly television schedules, daily weather reports, selected stock price etc as

a new application);

"generating a second user interface data set in accordance with the new

application, the second user interface data set representing spoken language interface

elements and data recognizable by the new application" (col. 4, lines 1-35, as the

additional application data may be suitably communicated in the form of digital data

depending upon the particular application and col. 5, lines 8-22);

"transferring the second user interface data set from the device to the apparatus"

(col. 3, line 66 to col. 4, line 21, as transmitting the phonetic spelling requires less to be

sent then transmitting acoustic representations of the same words); and

"loading the second user interface data set into the data structure of the

apparatus" (col. 4, lines 1-36, as the device receives the updated phonetic spellings and

additional application data).

As per claim 2, Basore teaches, "audibly notifying the user that the new

application is useable via the audio output system" (col. 5, lines 23-40, as per help

command the application software reside in the microprocessor select the active

vocabulary in the dictionary).

As per claim 3, Basore teaches, "removing a user interface data set from the

data structure" (col. 4, lines 15-21, as additional application data that have been added,

deleted or changed since the previous update are communicated to the device).

As per claim 4, Basore teaches, "the user interface data set is removed prior to

the loading step in accordance with a least recently used algorithm" (col. 4, 15-21, as to

preserve memory, obsolete phonetic spelling are deleted from the local dictionary).

As per claim 5, Basore teaches, "the user interface data set is in accordance with

a request by an application" (col. 4, lines 1-21, as additional application data that are is

relevant to the applications for whose services the user is registered is also

communicated to the device").

As per claim 9, Basore teaches, "the new application comprises a speech aware

application, the speech aware application being responsive to user utterances for at

least partially interacting with the new application" (col. 5, lines 8-22, as new application

is TV schedule).

As per claim 10, Basore teaches, "the device prompting the user for information

comprising a spoken utterance, the device manager being responsive to the spoken

utterance for operatively modifying at least one of a predetermined parameter of the

device and an application running on the device" (col. 4, lines 22-36, as updating

phonetic spelling and additional application data).

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7.   Claims 6, 7, 13 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated

by Mozer et al. (US 2002/0091513 A1, effective filling date December 6, 1996).

As per claim 6 and 19, Mozer teaches, "a method of automatically providing a spoken language interface for a user with respect to at least one external network with which the user interacts, wherein the user process a portable spoken language interface device having a data structure for storing one or more user interface data sets used to provide one or more spoken language interfaces," the method comprising the steps of:

"the device requesting a spoken language interface data set from the external network upon discovery of the external network" (Page 3, Paragraph 0032, reads on "at step 202, pattern recognition programming system 112 accesses external medium to verify it in fact contains recognition set data and weight set data of kind employed by pattern recognition system . . . at step 204, pattern recognition programming system 212 retrieves an initial set of words and associated weight set into weight memory 110");

"the external network transferring the spoken language interface data set to the device; and loading the spoken language interface data set into the data structure of the device for use by the user interfacing with the external network" (Page 3, paragraph 0032 and 0033, reads on "at step 202, pattern recognition programming system 112 accesses external medium to verify it in fact contains recognition set data and weight set data of kind employed by pattern recognition system . . . at step 204, pattern recognition programming system 212 retrieves an initial set of words and associated weight set into weight memory 110 . . . the new recognition set and weight sets are transferred from external medium to the weight memory through external interface").

As per claim 7, Mozer teaches, "wherein the device is in wireless communications with the external network" (Fig. 1, wireless connection between element 118 (external Interface) and 104 (external medium)).

As per claim 13, Mozer teaches, "the device prompting the user for information comprising a spoken utterance, the device manager being responsive to spoken utterance for operatively modifying at least one of the predetermined parameter of the device and an application running on the device" (Page 3, paragraph 0029, reads on "the information presented to the user may include prompts for input to microphone or application specific information" and Paragraph 0033 reads on "pattern recognition programming system receives the recognition results and selects a new set of words and associated weight set based on this results". Here, "a new set of words and associated weight set" is "one of the predetermined parameter").

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 11, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basore (US 5,752,232) and Mozer (US 2002/0091513 A1) as applied to claims 10 and 13 above, and further in view of Surace et al. (US 6,144,938).

As per claims 11, 12, 14 and 15, Basore and Mozer do not explicitly teach, "prompting the user for information includes the steps of storing one or more user experience parameters corresponding to a familiarity of the user with a predetermined procedure of the application; and selecting a prompt from a set of prompts for presentation to the user, the set of prompts including varying amounts of instruction based at least in part on experience parameters, the selected prompt substantially matching the stored experience parameters of the user"; and

"prompting the user for information includes the steps of: storing an internal data set including at least one of a date, a time and a number of times which a predetermined procedure of an application is performed; and selecting a prompt from a set of prompts for presentation to the user, the set of prompts including varying amounts of instruction based at least in part on information included in the internal data set, the selected prompt substantially matching the stored internal data set".

However, Surace teaches, "prompting the user for information includes the steps of storing one or more user experience parameters corresponding to a familiarity of the user with a predetermined procedure of the application; and selecting a prompt from a set of prompts for presentation to the user, the set of prompts including varying amounts of instruction based at least in part on experience parameters, the selected prompt substantially matching the stored experience parameters of the user" (col. 14, lines 52-57); and

"prompting the user for information includes the steps of: storing an internal data set including at least one of a date, a time and a number of times which a

predetermined procedure of an application is performed; and selecting a prompt from a

set of prompts for presentation to the user, the set of prompts including varying amounts

of instruction based at least in part on information included in the internal data set, the

selected prompt substantially matching the stored internal data set" (col. 13, line 47 to

col. 14, line 40).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to use Surace's teaching in the invention of Basore or Mozer

because Surace teaches his invention provides a cost-effective and high performance

computer-implemented voice user interface with personality that can be used for various

applications in which a voice user interface is desired (col. 1, lines 51-55).

10.   Claims 8, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Mozer et al. (US 2002/0091513 A1) as applied to claim 6 above, and further in

view of Freadman (US 5,481,616), prior art of record.

As per claims 8 and 16, Mozer teaches, all the limitations as stated above in

claim 6, however, Mozer fails to teach, "a personal data assistant operatively coupled to

spoken language interface device, PDA including at least one application associate

therewith". However, Mozer teaches, at Page 2, paragraph 0023, "apparatus may

provide speech recognition capabilities to for example various electronic appliances

such as a compact disk changer, telephone, computer, television watch, etc.

components of apparatus may perform other functions besides speech recognition in

the context of such appliances. However, Freadman teaches an apparatus providing a

microphone, speech input and output, and a speech interface to another device,

including telephone capability (col. 2, lines 5-21) Freadman also teaches the device

providing with speech interface as the device is a personal digital assistant (at col. 3,

lines 31-40, as a hand-held computer, known as a personal digital assistant, receives

the card operative to equip the computer with the sound capability). Therefore, it would

have been obvious to one of ordinary skill in the art at the time of the invention to

include Mozer's concept of speech recognition and a digital signal processor interfacing

speech input in a consumer electronic products because that would have coordinated

control of voice input, commanding, and audio output to Freadman's personal digital

assistant.

As per claim 17, Mozer teaches, "wherein the portable spoken language interface

device is a wireless communication with the external network" (Fig. 1, wireless

connection between element 118 (external Interface) and 104 (external medium)).

Claim 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mozer

et al. (US 2002/0091513) and Freadman as applied to 16 above, and further in view of

Abella et al. (US 6,044,347).

As per claim 18, Mozer and Freadman teach all the limitation stated above in

claim 16.

However as per claims18, Mozer and Freadman fails to teach,

"in apparatus for providing a portable spoken language interface for a user to a device in communication with the apparatus, the device having at least one application associated therewith, the spoken language interface apparatus comprising:"

"an audio input system for receiving speech data provided by the user";

"an audio output system for outputting speech data to the user";

"a speech recognition engine for generating an output in response to spoken utterances";

"a speech synthesizing engine for generating a synthesized speech output in response to text data";

"a dialog manager operatively coupled to the device, the audio input system, the audio output system, the speech recognition engine and the speech synthesizing engine"; and

"at least one user interface data set operatively coupled to the dialog manager, the user interface data set representing spoken language interface elements and data recognizable by the application of the device"; wherein:

(i)"the dialog manager enables connection between the input audio system and the speech recognition engine such that the spoken utterance provided by the user is provided from the input audio system to the speech recognition engine"; "(ii) the output generated by the speech recognition engine is returned to the dialog manager"; "(iii) the dialog manager uses the output generated by the speech recognition engine to search the user interface data set for a corresponding spoken language interface element and data which is returned to the dialog manager when found"; "(iv) the dialog manager

provides the spoken language interface element associated data to the application of the device for processing in accordance therewith"; "(v) the application of the device, on processing that element, provides a reference to an interface element to be spoken"; "(vi) the dialog manager enables connection between the audio output system and the speech synthesizing engine such that the speech synthesizing engine which, accepting data from that element, generates a synthesized output that expresses that element"; and "(vii) the audio output system audibly presenting the synthesized output to the user".

However, Abella teaches, above limitations:

"in apparatus for providing a portable spoken language interface for a user to a device in communication with the apparatus, the device having at least one application associated therewith, the spoken language interface apparatus comprising:"

"an audio input system for receiving speech data provided by the user" (col. 4, lines 43-44, reads "the system receives a speech signal in the form of utterances from a user via a microphone");

"an audio output system for outputting speech data to the user" (col. 4, lines 51-53, reads "generates an output speech signal by supplying appropriate drive signals to a speech synthesizer);

"a speech recognition engine for generating an output in response to spoken utterances" (col. 4, lines 45-57, a speech recognition units);

"a speech synthesizing engine for generating a synthesized speech output in response to text data" (col. 4, lines 45-57, speech synthesizer and col. 5, lines 1-15,

here text can be inputted and text can be outputted and inherently by the synthesizer

speech can be outputted);

"a dialog manager operatively coupled to the device, the audio input system, the

audio output system, the speech recognition engine and the speech synthesizing

engine" (col. 7, line 51, dialog manager); and

"at least one user interface data set operatively coupled to the dialog manager,

the user interface data set representing spoken language interface elements and data

recognizable by the application of the device" (col. 44-56, application is the interface

data set and reads on "dialog manager is configured to recognize the user request") ;

wherein:

(i)"the dialog manager enables connection between the input audio system and

the speech recognition engine such that the spoken utterance provided by the user is

provided from the input audio system to the speech recognition engine" (Fig. 2,

elements 30 and 34); "(ii) the output generated by the speech recognition engine is

returned to the dialog manager" (Fig. 2, element 40); "(iii) the dialog manager uses the

output generated by the speech recognition engine to search the user interface data set

for a corresponding spoken language interface element and data which is returned to

the dialog manager when found" (Fig. 2, element 42); "(iv) the dialog manager provides

the spoken language interface element associated data to the application of the device

for processing in accordance therewith" (Fig. 2, element 42); "(v) the application of the

device, on processing that element, provides a reference to an interface element to be

spoken" (Fig. 2, element 42); "(vi) the dialog manager enables connection between the

audio output system and the speech synthesizing engine such that the speech

synthesizing engine which, accepting data from that element, generates a synthesized

output that expresses that element" (Fig. 2, element 32 and Fig. 1, element 20); and

"(vii) the audio output system audibly presenting the synthesized output to the user"

(Fig. 2, element 32 and Fig. 1, element 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to use a device including a duologue manager as taught by Abella,

in the invention of Mozer because Abella teaches his invention provides an object-

oriented dialogue manager which allows a computer system or other dialogue

processing system to conduct an efficient dialog with a human user (col. 2, lines 32-35).

Contact Information

11.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Abul K. Azad** whose telephone number is **(703) 305-**

3838.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **Richemond Dorvil**, can be reached at **(703) 305-9645.**

Any response to this action should be mailed to:

> **Commissioner for Patents**
>
> **P.O. Box 1450**
>
> **Alexandria, VA 22313-1450**

Or faxed to:

(703) 872-9314

(For informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to 2121 Crystal Drive, Arlington,

VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should

be directed to the Technology Center's Customer Service Office whose telephone

number is **(703) 306-0377.**

Abul K. Azad

January 21, 2004

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER